```
    FILE 'HCAPLUS' ENTERED AT 09:12:22 ON 22 DEC 2008
L1      1123946 S IMMUN?
L2          800 S DEXTRAN(6A)PHOSPH?
L3        31511 S POLYPHOSPHATE OR POLYPHOSPHORIC
L4           13 S L2 AND L3
L5        74419 S MOLECULAR WEIGHT
L6           13 S L2 AND L5
L7           10 S L6 AND (PY<2003 OR AY<2003 OR PRY<2003)
L8           93 S L1 AND L2
L9           69 S L8 AND (PY<2003 OR AY<2003 OR PRY<2003)
L10           0 S L9 AND L5
L11     4685617 S DEGREE OR PHOSPHORYLATION
L12           5 S L9 AND L11
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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'HCAPLUS' ENTERED AT 09:12:22 ON 22 DEC 2008
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FILE COVERS 1907 - 22 Dec 2008  VOL 149 ISS 26
FILE LAST UPDATED: 21 Dec 2008  (20081221/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s immun?
L1     1123946 IMMUN?

=> s dextran(6a)phosph?
         40028 DEXTRAN
       1991335 PHOSPH?
L2         800 DEXTRAN(6A)PHOSPH?

=> s polyphosphate or polyphosphoric
         16181 POLYPHOSPHATE
         20650 POLYPHOSPHORIC
L3       31511 POLYPHOSPHATE OR POLYPHOSPHORIC

=> s l2 and l3
L4           13 L2 AND L3

=> d l4 1-13 ti abs bib

L4   ANSWER 1 OF 13  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Porous calcium phosphate bone material
AB   Porous calcium phosphate implant compns. that approx. the chemical composition
of
     natural bone mineral are provided.  In addition to calcium phosphate, the
     compns. include an effervescent agent to promote the formation of
     interconnected pores and a cohesiveness agent to maintain the shape and
     hardness of the hardened composition  When introduced at an implant site, the
     calcium phosphate compns. are remodeled into bone.  Methods for using the
     calcium phosphate compns., e.g., to repair or replace bone, are also
     provided.  Thus, amorphous calcium phosphate was prepared as follows.  Solution
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of disodium hydrogen phosphate heptahydrate 1000 g in distilled water 14.4 mL was prepared and stirred. To this solution, sodium hydroxide 555 g, sodium bicarbonate 333 g, and sodium pyrophosphate decahydrate 2.2 g were added sequentially to form solution 1. A solution of calcium nitrate tetrahydrate
208
g in 5.6 L of distilled water was prepared and of magnesium chloride hexahydrate 11 g was added to this solution to form solution 2. Solution 2 was quickly poured into solution 1 at room temperature and stirred for 1 min. The amorphous calcium phosphate precipitated immediately and completely.

AN 2007:619421 HCAPLUS <<LOGINID::20081222>>
DN 147:39252
TI Porous calcium phosphate bone material
IN Rosenberg, Aron D.; Gilles De Pelichy, Laurent D.; Bondre, Shrikar; Strunk, Michael
PA USA
SO U.S. Pat. Appl. Publ., 20pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070128245	A1	20070607	US 2005-294819	20051206
	AU 2006322025	A1	20070614	AU 2006-322025	20061206
	CA 2632785	A1	20070614	CA 2006-2632785	20061206
	WO 2007067561	A2	20070614	WO 2006-US46435	20061206
	WO 2007067561	A3	20071011		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	EP 1962716	A2	20080903	EP 2006-844849	20061206
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	US 2005-294819	A	20051206		
	WO 2006-US46435	W	20061206		

L4 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Delayed-setting calcium phosphate pastes
AB The invention features delayed-setting calcium phosphate pastes which are useful for the preparation of delivery vehicles for biol. active agents, useful for the treatment of orthopedic conditions and can be stored for long periods without prematurely setting. For example, amorphous Ca phosphate and dicalcium phosphate dihydrate powders were mixed and ball-milled. The resultant powder was mixed with a methylpyrrolidone solvent containing DL-lactide-glycolide copolymer to give a paste.
AN 2005:1314368 HCAPLUS <<LOGINID::20081222>>
DN 144:57638
TI Delayed-setting calcium phosphate pastes
IN Lee, Dosuk D.; Rosenberg, Aron D.; Gilles De Pelichy, Laurent D.; Sutaria, Manish; Tofighi, Aliassghar N.
PA Etex Corporation, USA; Lee, Youngmi M.
SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005117919	A2	20051215	WO 2005-US12583	20050414
	WO 2005117919	A3	20070607		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
	AU 2005249365	A1	20051215	AU 2005-249365	20050414
	CA 2562675	A1	20051215	CA 2005-2562675	20050414
	EP 1742648	A2	20070117	EP 2005-778214	20050414
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
	JP 2007533376	T	20071122	JP 2007-508509	20050414
	KR 2007033970	A	20070327	KR 2006-723613	20061110
	US 20080028992	A1	20080207	US 2006-578337	20061226
PRAI	US 2004-562497P	P	20040415		
	WO 2005-US12583	W	20050414		

L4 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Dextran from Leuconostoc mesenteroides augments immunostimulatory effects by the introduction of phosphate groups

AB The immunol. effects of phosphorylated dextran (in which phosphate groups were chemical introduced) on murine splenocytes were examined When dextran produced by Leuconostoc mesenteroades was phosphorylated by a reaction with polyphosphoric acid in formamide solution for 48 h, the degree of phosphorylation of dextran was maximal. The highest phosphorus content (1.7%o, wt/wt) was observed in 40 kDa of dextran. The mitogenic response of murine splenocytes was enhanced by the phosphorylated dextran, but its activity was not related to its mol. weight A strong response was detected at a concentration of 10 to 500 μg/mL, and the highest activity was obtained 48 h after stimulation. Phosphorylated dextran was characterized as a B-cell-specific mitogen. The expressions of CD86 on CD8α-CD11c- and CD8α-CD11c+ cells were augmented by phosphorylated dextran. The levels of mRNA expression of gamma interferon and interleukin-10 on murine splenocytes were also increased by the stimulation. These results demonstrate that dextran exerts immunostimulation by the introduction of phosphate groups.

AN 2004:731155 HCAPLUS <<LOGINID::20081222>>

DN 142:5362

TI Dextran from Leuconostoc mesenteroides augments immunostimulatory effects by the introduction of phosphate groups

AU Sato, Toshihiro; Nishimura-Uemura, Junko; Shimosato, Takeshi; Kawai, Yasushi; Kitazawa, Haruki; Saito, Tadao

CS NOF Corporation, Shibuya-ku, Tokyo, 150-6019, Japan

SO Journal of Food Protection (2004), 67(8), 1719-1724
CODEN: JFPRDR; ISSN: 0362-028X
PB International Association for Food Protection
DT Journal
LA English
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Phosphorylated dextran as immunopotentiator
AB It is clarified that an immunopotentiation activity can be imparted to dextran, which shows no immunol. activity, by chemical phosphorylating it. The phosphorylated dextran is a B cell mitogen, activates dendritic cells and induces IL-10 and IFN-γ. Thus, it is expected as being effective in preventing infectious diseases and colitis and preventing allergic diseases by maintaining the Th1/2 balance. Phosphorylated dextran was prepared from dextran and polyphosphoric acid, and its blastogenic effect on mouse spleen cells was examined
AN 2004:80514 HCAPLUS <<LOGINID::20081222>>
DN 140:151931
TI Phosphorylated dextran as immunopotentiator
IN Saito, Tadao; Kitazawa, Haruki
PA Meiji Dairies Corporation, Japan
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004009099	A1	20040129	WO 2003-JP9324	20030723
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004107316	A	20040408	JP 2003-50739	20030227
	AU 2003252244	A1	20040209	AU 2003-252244	20030723
	EP 1543833	A1	20050622	EP 2003-765361	20030723
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 20060154896	A1	20060713	US 2005-522047	20051020
PRAI	JP 2002-213305	A	20020723		
	JP 2003-50739	A	20030227		
	WO 2003-JP9324	W	20030723		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Phosphorus-containing polymers for optical signal transducers
AB Phosphorus-containing polymers suitable for coating dielec. surfaces are described by the general formulas P(A)m(F)n1(U)o1 (I) and P(A)m(UFn2)o2 (II) (P = (un)branched, (un)crosslinked homo- or heteropolymeric polymer component; A = identical or different phosphorus-containing groups bonded to P; m = .apprx.3-1000, F = identical or different functional groups bonded

directly or indirectly to P; n1 = .apprx.1-1000; n2 = .apprx.1-100, U = identical or different (un)branched (un)crosslinked oligomeric or polymeric segments made up of identical or different monomers which are bonded to P; o1 = .apprx.0-1000, o2 = .apprx.1-1000). Methods for preparing the polymers are described which entail copolymg. a monomer containing a phosphorus-containing group A, or a plurality of identical or different monomers containing identical or different phosphorus-containing groups A, with a
monomer containing a functional group F, or a plurality of identical or different monomers containing identical or different functional groups F, and optionally, a monomer containing a segment U, or a plurality of identical or different monomers containing identical or different segments U, to form I, or with a monomer containing a unit (UFn2)o2, or a plurality of identical or different monomers containing identical or different units of the formula (UFn2)o2, to form II. The use of the polymers for coating dielec. materials, in particular dielec. waveguides, and optical signal transducers with dielec. waveguides coated by the polymers are also described. The optical signal transducers having a coated dielec. waveguides may be used for immobilizing chemical and/or biochem. recognition elements.

AN 2002:638105 HCAPLUS <<LOGINID::20081222>>

DN 137:181915

TI Phosphorus-containing polymers for optical signal transducers

IN Dorn, Ingmar; Kohler, Burkhard

PA Bayer Aktiengesellschaft, Germany

SO U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020114604	A1	20020822	US 2002-81628	20020220
	US 7101945	B2	20060905		
	DE 10108483	A1	20020905	DE 2001-10108483	20010222
	CA 2438648	A1	20020906	CA 2002-2438648	20020211
	WO 2002068481	A1	20020906	WO 2002-EP1399	20020211
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002238547	A1	20020912	AU 2002-238547	20020211
	AU 2002238547	B2	20070712		
	EP 1366088	A1	20031203	EP 2002-704708	20020211
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004528414	T	20040916	JP 2002-567990	20020211
	US 20060287453	A1	20061221	US 2006-507329	20060821
PRAI	DE 2001-10108483	A	20010222		
	WO 2002-EP1399	W	20020211		
	US 2002-81628	A3	20020220		

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Phosphorylated polyhydroxy compounds for tartar control

AB An anticariogenic anticalculus dentifrice comprise an anticariogenic agent and an antitartar agent. The antitartar agent is formed by phosphorylation of a plyhydroxy compound with mol. weight ≤5000 kDa. The phosphorylated polyhydroxy compound has a molar substitution of ≤2 based on mol. weight of an average repeat unit in th starting polyhydroxy compound and possesses phosphate ester linkage satisfying at least 1 criteria of (a) ≥1 multi-substituted phosphate ester linked through an O to a single C of the polyhydroxy compound, and (b) ≥2 monophosphate groups separated by ≤ 3 C. Dextran (I) was added to a solution of polyphosphric acid, tri-N-butylamine, and N,N-dimethylforamide and heated to 120° for 6h, then it was poured into EtOH. Saturated NaCl solution was added to the above mixture to aid polymer precipitation followed by
purification and lyophilization of precipitate to obtain a white powder. Formulation
of a toothpaste containing the phosphorylated I is given.

AN 1993:197835 HCAPLUS <<LOGINID::20081222>>
DN 118:197835
OREF 118:33861a,33864a
TI Phosphorylated polyhydroxy compounds for tartar control
IN Spaltro, Suree Methmanus; Aronson, Michael Paul
PA Unilever N. V., Neth.; Unilever PLC
SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 512599	A2	19921111	EP 1992-201108	19920421
	EP 512599	A3	19930512		
	EP 512599	B1	19951220		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	US 5202111	A	19930413	US 1991-697835	19910509
	AT 131721	T	19960115	AT 1992-201108	19920421
	ES 2082342	T3	19960316	ES 1992-201108	19920421
PRAI	US 1991-697835	A	19910509		

L4 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Method for immobilizing polyphosphate-glucose phosphotransferase
AB The title method comprises incubating an inorg. carrier coated with a peptide for 20-30 h at 20-40° with a 1-39° buffered solution of Dextran Blue at pH 8.0, and then incubating the washed and dried adsorbent with a 0.1-0.3% solution of the enzyme at pH 8-9 and 4° for 25-50 h. The enzyme was immobilized on Dextran Blue-containing silica gel coated with collagen.

AN 1991:674631 HCAPLUS <<LOGINID::20081222>>
DN 115:274631
OREF 115:46534c,46536a
TI Method for immobilizing polyphosphate-glucose phosphotransferase
IN Kowalczyk, Tomasz; Szymona, Olga; Wolski, Tadeusz
PA Akademia Medyczna, Lublin, Pol.
SO Pol., 3 pp.
CODEN: POXXA7
DT Patent
LA Polish
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 152887	B1	19910228	PL 1987-265083	19870407
PRAI	PL 1987-265083		19870407		

L4 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI A reinvestigation of the phosphorlyation of dextran with polyphosphoric acid: evidence for the formation of different types of phosphate moieties
AB The products of phosphorylation of dextran with polyphosphoric acid were re-investigated by gel filtration, potentiometric titration, and 31P NMR spectroscopy. Mainly (80-88%) alkyl phosphates were formed together with alkyl diphosphates and dialkyl phosphates, the percentages of which depended on the duration of phosphorylation. Mild acid treatment of the crude samples hydrolyzed the diphosphates and gave products with >95% of monophosphate structures.
AN 1989:194996 HCAPLUS <<LOGINID::20081222>>
DN 110:194996
OREF 110:32369a,32372a
TI A reinvestigation of the phosphorlyation of dextran with polyphosphoric acid: evidence for the formation of different types of phosphate moieties
AU Sacco, Daniel; Klett-Zygmunt, Daniele; Dellacherie, Edith
CS Lab. Chim.-Phys. Macromol., CNRS, Nancy, 54042, Fr.
SO Carbohydrate Research (1988), 184, 193-202
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English

L4 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Interactions between dextran phosphates and human hemoglobin
AB Dextran phosphates were prepared by direct phosphorylation of dextran of .hivin.Mw .simeq. 36,000 by means of polyphosphoric acid. This reaction gives rise to a mixture of structures containing at least 80-85% of diprotic monoesters such as ROPO3H2, the other structures being more complex in particular with crosslinking chains such as -OP(O)(OH)OP(O)(OH)-. These chains can be hydrolyzed in acidic conditions leading to polysaccharide derivs. containing phosphates essentially under the diprotic monoester form. These various compds., in the presence of Hb, provoke a decrease of its affinity for O and this effect increases with the phosphate substitution rate and with the amount of -OP(O)(OH)OP(O)(OH)- chains. The covalent fixation of these polyanionic dextrans onto Hb should lead to the oxygen-carrier conjugates with high mol. weight and low O affinity, useful in blood transfusion.
AN 1988:443346 HCAPLUS <<LOGINID::20081222>>
DN 109:43346
OREF 109:7217a,7220a
TI Interactions between dextran phosphates and human hemoglobin
AU Zygmunt, D.; Labrude, P.; Vigneron, C.; Sacco, D.; Dellacherie, E.
CS Lab. Chim. Phys. Macromol., ENSIC, Nancy, 54042, Fr.
SO Journal de Chimie Physique et de Physico-Chimie Biologique (1988), 85(2), 315-18
CODEN: JCPBAN; ISSN: 0021-7689
DT Journal
LA French

L4 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI A radioimmunoassay for guanosine-5'-diphosphate-3'-diphosphate and adenosine-5'-triphosphate-3'-diphosphate
AB A radioimmunoassay for guanosine-5'-diphosphate-3'-diphosphate (ppGpp) and adenosine-5'-triphosphate-3'-diphosphate (pppApp) has been developed. The assay method is based on competition of an unlabeled highly phosphorylated nucleotide with 3H-labeled highly phosphorylated nucleotide for binding

sites on a specific antibody. Antibodies to ppGpp and pppApp were obtained by immunizing rabbits with the antigen prepared by conjugating ppGpp with human serum albumn using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide, and with the antigen prepared by conjugating 8-(6-aminohexyl)amino-adenosine-5'-triphosphate-3'-diphosphate with human serum albumin using glutaraldehyde, resp. Antibody-bound 3H-labeled highly phosphorylated nucleotides were separated from the free 3H-labeled highly phosphorylated nucleotides by selective adsorption on dextran-coated charcoal. Displacement plots were linear over a concentration range of 5-1000 pmol/assay tube in a log-probit percent plot. Application of this method to biol. systems offers improved accuracy and convenience compared with the previous 32PO4-labeling technique.

AN 1981:79698 HCAPLUS <<LOGINID::20081222>>
DN 94:79698
OREF 94:12939a,12942a
TI A radioimmunoassay for guanosine-5'-diphosphate-3'-diphosphate and adenosine-5'-triphosphate-3'-diphosphate
AU Hamagishi, Yasutaro; Oki, Toshikazu; Tone, Hiroshi; Inui, Taiji
CS Cent. Res. Lab., Sanraku-Ocean Co., Ltd., Fujisawa, 251, Japan
SO Journal of Biochemistry (Tokyo, Japan) (1980), 88(6), 1785-92
CODEN: JOBIAO; ISSN: 0021-924X
DT Journal
LA English

L4 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Esters of polysaccharides with phosphoric acid and palmitric acid
AB Water-soluble polysaccharides are treated with palmitic acid halide and phosphorylation reagents in the presence of tertiary amine in formamide solvent to obtain polysaccharide phosphate palmitates. The products are effective in controlling tumor growth. Thus, 1 part dextran (mol. weight 40,000) was dissolved in 100 parts formamide and to this were added Bu3N 20 and palmitoyl chloride 5.0 parts. The mixture was heated at 70° for 2 h and to this was added 5 parts polyphosphate. The mixture was allowed to stand at room temperature for 24 h and to this was added 400 parts MeOH. The precipitate was collected, washed with MeOH, and suspended in water. The pH of the suspension was adjusted to 10 with 10% NaOH and centrifuged. The supernatant was treated with 400 parts MeOH. The precipitate was collected, washed with MeOH, and dried in vacuo to obtain a water-soluble fraction. The water-soluble fraction (1 part) was dissolved in water and worked up to yield an dextran phosphate palmitate [63026-23-3]. The compound contained sugars 46.3, P 2.3, and palmitic acid 47.8%.

AN 1977:429017 HCAPLUS <<LOGINID::20081222>>
DN 87:29017
OREF 87:4551a,4554a
TI Esters of polysaccharides with phosphoric acid and palmitric acid
IN Suzuki, Shigeo; Suzuki, Masuko; Mikami, Takeshi
PA Kowa Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 52028583	A	19770303	JP 1975-104626	19750829
	JP 57056921	B	19821202		
PRAI	JP 1975-104626	A	19750829		

L4 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrans, and dextran phosphate
AB Three O-palmitoyldextran phosphates (PalDP) were prepared by esterification of dextran with palmitoyl chloride and polyphosphoric acid. One of the H2O-insol. PalDP showed 82% growth regression against sarcoma 183 ascites-tumor in mice when administered at 1 mg/kg/day for 5 days. The H2O-soluble PalDP showed 17% growth regression at the same dosage when administered alone and 83% when combined with mitomycin C. O-palmitoyldextrans and dextran phosphates were inactive in the inhibition of this ascites tumor. Thus, the existence of both fatty acid and phosphate groups is necessary to manifest antitumor activity in polysaccharides.
AN 1977:406278 HCAPLUS <<LOGINID::20081222>>
DN 87:6278
OREF 87:1021a,1024a
TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrans, and dextran phosphate
AU Suzuki, Masuko; Mikami, Takeshi; Matsumoto, Tatsuji; Suzuki, Shigeo
CS Dep. Microbiol., Tohoku Coll. Pharm., Sendai, Japan
SO Carbohydrate Research (1977), 53(2), 223-9
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English

L4 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Precipitation methods in plasma fractionation
AB A review of recent developments in large-scale plasma fractionation techniques, some of which are applicable to routine laboratory work. Many different reagents may be used for the above purpose including organic solvents, (NH4)2SO4, synthetic organic compds., and natural products such as amino and fatty acids, phytoagglutinins, and tannic acid. Future plasma fractionation may use as many reagents as those already proposed for the separation of lipoproteins: heparin dextran sulfate, gelatin, phytic acid, uric acid, phosphotungstate, polyphosphate, poly(vinylpyrrolidinone), polyethylene glycol, anionic detergents, cationic detergents, chlortetracycline, oxytetracycline, leucocyanidol. Precipitating agents should not destroy the mol. amount of the protein being separated by using extreme pH values. A suitable reagent not only leaves the protein structure intact, but must also be easily removed, and the trace amts. remaining should be innocuous in the human organism. 76 refs.
AN 1972:485995 HCAPLUS <<LOGINID::20081222>>
DN 77:85995
OREF 77:14177a,14180a
TI Precipitation methods in plasma fractionation
AU Steinbuch, M.
CS Cent. Natl. Transfus. Sang., Paris, Fr.
SO Vox Sanguinis (1972), 23(1), 92-106
CODEN: VOSAAD; ISSN: 0042-9007
DT Journal; General Review
LA English

=> s molecular weight
1328116 MOLECULAR
168516 WEIGHT
L5 74419 MOLECULAR WEIGHT
(MOLECULAR(W)WEIGHT)

```
=> s l2 and l5
L6          13 L2 AND L5

=> s l6 and (PY<2003 or AY<2003 or PRY<2003)
      22962889 PY<2003
       4501251 AY<2003
       3969814 PRY<2003
L7          10 L6 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l7 1-10 ti abs bib

L7   ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Porous beta-tricalcium phosphate granules for bone implantation, and
     methods for producing same
AB   A porous β-tricalcium phosphate material for bone implantation is
     provided.  The multiple pores in the porous TCP body are sep. discrete
     voids and are not interconnected.  The pore size diameter is in the range of
     20-500 μm, preferably 50-125 μm.  The porous β-TCP material
     provides a carrier matrix for bioactive agents and can form a moldable
     putty composition upon the addition of a binder.  Preferably, the bioactive
agent
     is encapsulated in a biodegradable agent.  The invention provides a kit
     and an implant device comprising the porous β-TCP, and a bioactive
     agent and a binder.  The invention also provides an implementable
     prosthetic device comprising a prosthetic implant having a surface region,
     a porous β-TCP material disposed on the surface region optionally
     comprising at least a bioactive agent or a binder.  Methods of producing
     the porous β-TCP material and including bone formation are also
     provided.
AN   2002:695831  HCAPLUS <<LOGINID::20081222>>
DN   137:237785
TI   Porous beta-tricalcium phosphate granules for bone implantation, and
     methods for producing same
IN   Dalal, Paresh S.; Dimaano, Godofredo R.; Toth, Carol Ann; Kulkarni,
     Shailesh C.
PA   Stryker Corporation, USA
SO   PCT Int. Appl., 151 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   WO 2002070029        A2    20020912    WO 2002-US5827         20020226 <--
     WO 2002070029        A3    20030206
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 20030049328        A1    20030313    US 2001-798518         20010302 <--
     US 20030180376        A1    20030925    US 2001-960789         20010921 <--
     US 6949251            B2    20050927
     CA 2439813            A1    20020912    CA 2002-2439813        20020226 <--
     AU 2002306592         A1    20020919    AU 2002-306592         20020226 <--
     EP 1372748            A2    20040102    EP 2002-748362         20020226 <--
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2005505311 T 20050224 JP 2002-569200 20020226 <--
PRAI US 2001-798518 A 20010302 <--
US 2001-960789 A 20010921 <--
WO 2002-US5827 W 20020226 <--

L7 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Effect of dextran molecular weight on protein stabilization during freeze-drying and storage
AB The effect of dextran mol. weight on structural stability of freeze-dried products and protein stability in amorphous matrixes was investigated during storage at elevated temps. Glucose-6-phosphate dehydrogenase (G6PDH) was freeze-dried in 10% dextrans of 5 mol. wts. (12, 42, 71, 512, and 2000 kD) to residual water content of 0.027g/g dry mass. The mol. weight of dextrans affected the glass transition temperature (Tg) of freeze-dried products and the recovery of enzyme activity after freeze-drying. As the mol. weight of dextrans increased from 12 to 2000 kD, the Tg increased from 100 to 120°, whereas the recovery of protein activity decreased from 85 to 70%. The inactivation of freeze-dried protein during storage followed a bi-phasic first-order kinetics. The stability of amorphous matrixes and protein increased significantly as the mol. weight increased from 12 to 512 kD. However, at a higher mol. weight (2000 kD), the stability was reduced. In a sep. experiment, the stability of dried dextran/protein samples was studied during heating from 30 to 99° at 0.2°/min and subsequent incubation at 99°. Dextran with an average mol. weight of 512 kD again provided the best protection. Mechanisms that cause the differences in protein stability among different mol. weight dextrans remain unclear.
AN 2001:923070 HCAPLUS <<LOGINID::20081222>>
DN 137:129693
TI Effect of dextran molecular weight on protein stabilization during freeze-drying and storage
AU Sun, Wendell Q.; Davidson, Paul
CS Department of Biological Sciences, National University of Singapore, Singapore, 119260, Singapore
SO Cryo-Letters (2001), 22(5), 285-292
CODEN: CRLED9; ISSN: 0143-2044
PB Cryo-Letters
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Critical Molecular Weight Effects in the Aggregation of Phospholipid Vesicles Triggered by Water-Soluble Polymers and an Integrated Glycolipid
AB The intervesicular aggregation of phospholipid vesicles is induced by the addition of water-soluble polymers such as polyethylene glycol, dextran, etc. due to the interaction between the vesicular surface and the water-soluble polymers. The interaction can be expressed by the critical mol. weight (Mc) of the water-soluble polymers for the aggregation of vesicles. The surface modification of vesicles with glycolipids [O1,O5-bis(octadecyl) N-maltooligonoyl-L-glutamate] accelerates the aggregation of vesicles induced by dextran; therefore, Mc significantly decreased due to the surface modification. No dependence of phospholipid concentration and dextran concentration in an aqueous phase on the Mc indicates that dextran does not act as a crosslinking agent among the vesicles. A clear dependence of the d. of the saccharide chains on the vesicular surface on the Mc suggests that dextran should adsorb on the surface of the vesicles by the interaction with the oligosaccharide chains on the surface and

cause vesicular aggregation. A lower critical solution temperature was observed for this kind of interaction, and the critical temperature was controlled by changing the mol. weight of dextran.

AN 1996:672694 HCAPLUS <<LOGINID::20081222>>
DN 126:11474
OREF 126:2375a,2378a
TI Critical Molecular Weight Effects in the Aggregation of Phospholipid Vesicles Triggered by Water-Soluble Polymers and an Integrated Glycolipid
AU Takeoka, Shinji; Sou, Keitaro; Arase, Shinya; Ohgushi, Takeru; Tsuchida, Eishun
CS Advanced Research Institute for Science and Engineering, Waseda University, Tokyo, 169, Japan
SO Macromolecules (1996), 29(25), 8132-8136
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Organ preservation solutions containing low molecular weight dextrans
AB An organ preservation solution containing a low mol. weight dextran in a pharmacol. acceptable storage solution is prepared for storage and preservation of organs for transplantation. A preservation solution contained sodium 141, phosphate 79, dextran (mol. weight = 5000-10,000) 30 mmol/L. Rat kidneys stored in the above solution exhibited no significant necrosis after 5 days of cold storage, while those stored in Euro-Collins solution exhibited total necrosis of most of the cortical unriniferous tubules following 3 days of cold storage.
AN 1994:331166 HCAPLUS <<LOGINID::20081222>>
DN 120:331166
OREF 120:58099a,58102a
TI Organ preservation solutions containing low molecular weight dextrans
IN Andrews, Peter
PA Georgetown University, USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5306711	A	19940426	US 1992-903477	19920624 <--
PRAI US 1992-903477		19920624 <--		

L7 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Recovery of enzyme/protein using liquid-liquid extraction
AB Partition coeffs. of a series of amino acids and some proteins (Kaa and Kpr) with various relative hydrophobicities have been determined at their isoelec. points (PI) in the aqueous 2-phase systems, PEG (polyethylene glycol)/DEX (dextran) and PEG/PK (potassium phosphates), varying mol. weight (MW) and concentration of the phase-forming polymer. Hydrophobicity factor HF of these phase systems, defined as the increment of Kaa with changes in the relative hydrophobicity of amino acids used,

are correlated with MW and concentration of PEG, and further, with Kpr regardless
of the phase system. Partition coeffs. of proteins can be varied and manipulated according to these correlations.
AN 1989:611392 HCAPLUS <<LOGINID::20081222>>
DN 111:211392
OREF 111:34983a,34986a
TI Recovery of enzyme/protein using liquid-liquid extraction
AU Kuboi, Ryoichi; Wang, Wei Hong; Tanaka, Hisakazu; Komasawa, Isao
CS Fac. Eng. Sci., Osaka Univ., Osaka, 560, Japan
SO Proc. Symp. Solvent Extr. (1988), 197-198.5 Publisher: Jpn. Assoc. Solvent Extr., Hamamatsu, Japan.
CODEN: 56PBAF
DT Conference
LA English

L7 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Acid-base properties and molecular-weight distribution of aminoalkylthiol and aminoalkylthiophosphate derivatives of dextrans
GI For diagram(s), see printed CA Issue.
AB The mol. wts. and polydispersion of aminoalkylthiol I [R = CH2NH(CH2)3NH(CH2)2SH] and aminoalkylthiophosphate I [R = CH:N(CH2)3NH(CH2)2SPO3H] (mol. weight 20000-60000) dextran derivs. show little or no change compared to the starting dextran dialdehyde. The pKa value of the thiol group in aqueous solns. of dextran aminoalkylthiol derivs. decreases with increasing degree of modification of dextran with similar mol. wts. compared to low-mol. weight aminoalkylthiols.
AN 1984:611597 HCAPLUS <<LOGINID::20081222>>
DN 101:211597
OREF 101:32079a,32082a
TI Acid-base properties and molecular-weight distribution of aminoalkylthiol and aminoalkylthiophosphate derivatives of dextrans
AU Bondarev, G. N.; Drobchenko, S. N.
CS Leningr. Inst. Yad. Fiz., Leningrad, USSR
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1984), (5), 1034-8
CODEN: IASKA6; ISSN: 0002-3353
DT Journal
LA Russian

L7 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Characterization of human cytomegalovirus DNA: infectivity and molecular weight
AB Human cytomegalovirus DNA was isolated from purified virions, subjected to sucrose d.-gradient centrifugation, and examined by electron microscopy. The viral DNA mols. were linear and had a length of 76.22 μm, corresponding to a mol. weight of 147.13 + 106 daltons. The DNA was infectious when tested in human embryonic lung cells using the DEAE-dextran and the Ca phosphate techniques. The d. in CsCl was 1.717 g/cm3.
AN 1979:571305 HCAPLUS <<LOGINID::20081222>>
DN 91:171305
OREF 91:27621a,27624a
TI Characterization of human cytomegalovirus DNA: infectivity and molecular weight
AU Geelen, J. L. M. C.; Walig, C.; Wertheim, P.; Van der Noordaa, J.
CS Lab. Gezondheidsleer, Univ. Amsterdam, Amsterdam, Neth.
SO IARC Scientific Publications (1978), 24(Oncogenesis Herpesviruses 3, Pt. 1), 97-103
CODEN: IARCCD; ISSN: 0300-5038
DT Journal

LA English

L7 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Aggregation of liposomes by Dextrans of high molecular weight
AB Sonicated dispersions (liposomes) of natural and synthetic phospholipids are aggregated reversibly by dextrans 40, 110, and 500. The dextran concentration required for aggregation is dependent on chain length, lipid composition of the liposome, and, for ionically-charged phospholipids, the ionic strength of the medium. Apparently, adsorption of dextrans to the erythrocyte surface can occur by interaction with surface phospholipid substituents.
AN 1979:35233 HCAPLUS <<LOGINID::20081222>>
DN 90:35233
OREF 90:5631a,5634a
TI Aggregation of liposomes by Dextrans of high molecular weight
AU Schachter, David
CS Dep. Physiol., Columbia Univ. Coll. Physicians Surg., New York, NY, USA
SO Biochemical and Biophysical Research Communications (1978), 84(4), 840-4
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English

L7 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Histochemical method for the demonstration of the activity of α-glucan phosphorylase. II. Relation of molecular weight of glucosyl acceptor dextran to activation of phosphorylase
AB Biochem. and histochem. investigation of the activity and localization of α-glucan phosphorylase in exptl. glycogen-depleted canine heart tissue, using dextran as enzyme acceptor, shows that only linear unbranched dextrans have acceptor properties. Michaelis-Menten constant detns. indicate that the enzyme affinity for dextran nonreducing end groups increases with increasing mol. weight of the acceptor. In glycogen-depleted tissue of anoxic and ischemic cardiac musculature there is gradual inactivation of the enzyme during the ischemic period and shortly before total inactivation the enzyme affinity for lower mol. weight dextran fractions is greatly reduced. It is therefore essential to use a high mol. weight unbranched dextran fraction in histochem. demonstration of phosphorylase activity in infarcted areas of the heart.
AN 1969:44355 HCAPLUS <<LOGINID::20081222>>
DN 70:44355
OREF 70:8313a,8316a
TI Histochemical method for the demonstration of the activity of α-glucan phosphorylase. II. Relation of molecular weight of glucosyl acceptor dextran to activation of phosphorylase
AU Meijer, A. E. F. H.
CS Univ. Amsterdam, Amsterdam, Neth.
SO Histochemie (1968), 16, 134-43
CODEN: HICHAU; ISSN: 0018-2222
DT Journal
LA English

L7 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Viscosimetric dextran molecular weight determination in intermediate products in the production of clinical materials

AB In the determination of the limiting viscosity as a measure of the average mol. weight of
dextran and intermediate products, no alc. can be present since this leads to too high a value for the limiting viscosity. Monosaccharides and NaCl have a negligible effect. Decomposition products of proteins have a marked influence on the limiting viscosity. The addition of phosphate buffer is rejected because it causes the limiting viscosity values to be too high.
AN 1965:50693 HCAPLUS <<LOGINID::20081222>>
DN 62:50693
OREF 62:8932h,8933a
TI Viscosimetric dextran molecular weight determination
in intermediate products in the production of clinical materials
AU Vavra, Ivan; Vavra, Ankica; Bajalovic, Ivan
CS Rudar. Fak, Belgrade
SO Acta Pharmaceutica Jugoslavica (1962), 12, 129-37
From: CZ 1964(33), Abstr. No. 1463.
CODEN: APJUA8; ISSN: 0001-6667
DT Journal
LA Croatian

=> d his

(FILE 'HOME' ENTERED AT 09:11:47 ON 22 DEC 2008)

FILE 'HCAPLUS' ENTERED AT 09:12:22 ON 22 DEC 2008
L1 1123946 S IMMUN?
L2 800 S DEXTRAN(6A)PHOSPH?
L3 31511 S POLYPHOSPHATE OR POLYPHOSPHORIC
L4 13 S L2 AND L3
L5 74419 S MOLECULAR WEIGHT
L6 13 S L2 AND L5
L7 10 S L6 AND (PY<2003 OR AY<2003 OR PRY<2003)

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-18.40	-18.40

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                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        75.00     75.21

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                       -18.40    -18.40

=> s l1 and l2
L8          93 L1 AND L2

=> s l8 and (PY<2003 or AY<2003 or PRY<2003)
      22962889 PY<2003
       4501251 AY<2003
       3969814 PRY<2003
L9          69 L8 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s l9 and l5
L10          0 L9 AND L5

=> s degree or phosphorylation
       4509676 DEGREE
        186292 PHOSPHORYLATION
L11    4685617 DEGREE OR PHOSPHORYLATION

=> s l9 and l11
L12          5 L9 AND L11

=> d l12 1-5 ti abs bib

L12  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Phosphorylated sugar alcohols from basidiomycetes and
     dextran as antiviral drugs and health foods
AB   Phosphorylated sugar alcs. (including β-glucan )from basidiomycetes
     and dextran prepared by pretreatment with ZnCl2 and urea melting or enzyme
     method are claimed as antiviral drugs (e.g. against HIV1) and health
     foods.
AN   2003:166958  HCAPLUS <<LOGINID::20081222>>
DN   138:163508
TI   Phosphorylated sugar alcohols from basidiomycetes and
     dextran as antiviral drugs and health foods
IN   Akabane, Toru; Kitani, Yoshiyasu; Baba, Masanori; Tadano, Toshio
PA   Uma K. K., Japan
SO   Jpn. Kokai Tokkyo Koho, 4 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   JP 2003063968        A     20030305    JP 2001-295057         20010823 <--
PRAI JP 2001-295057               20010823  <--

L12  ANSWER 2 OF 5  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Intestinal infection with Giardia spp. reduces epithelial barrier function
     in a myosin light chain kinase-dependent fashion
AB   Giardiasis causes malabsorptive diarrhea, and symptoms can be present in
     the absence of any significant morphol. injury to the intestinal mucosa.
     The effects of giardiasis on epithelial permeability in vivo remain
     unknown, and the role of T cells and myosin light chain kinase (MLCK) in
     altered intestinal barrier function is unclear.  This study was conducted
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to determine whether Giardia spp. alters intestinal permeability in vivo, to assess whether these abnormalities are dependent on T cells, and to assess the role of MLCK in altered epithelial barrier function. Immunocompetent and isogenic athymic mice were inoculated with axenic Giardia muris trophozoites or sterile vehicle (control), then assessed for trophozoite colonization and gastrointestinal permeability. Mechanistic studies using nontransformed human duodenal epithelial monolayers (SCBN) determined the effects of Giardia on myosin light chain (MLC) phosphorylation, transepithelial fluorescein isothiocyanate-dextran fluxes, cytoskeletal F-actin, tight junctional zonula occludens-1 (ZO-1), and MLCK. Giardia infection caused a significant increase in small intestinal, but not gastric or colonic, permeability that correlated with trophozoite colonization in both immunocompetent and athymic mice. In vitro, Giardia increased permeability and phosphorylation of MLC and reorganized F-actin and ZO-1. These alterations were abolished with an MLCK inhibitor. Conclusions: Disruption of small intestinal barrier function is T cell independent, disappears on parasite clearance, and correlates with reorganization of cytoskeletal F-actin and tight junctional ZO-1 in an MLCK-dependent fashion.

AN 2002:839408 HCAPLUS <<LOGINID::20081222>>
DN 138:120766
TI Intestinal infection with Giardia spp. reduces epithelial barrier function in a myosin light chain kinase-dependent fashion
AU Scott, Kevin G.-E.; Meddings, Jonathon B.; Kirk, David R.; Lees-Miller, Susan P.; Buret, Andre G.
CS Department of Biological Sciences, University of Calgary, AB, Can.
SO Gastroenterology (2002), 123(4), 1179-1190
CODEN: GASTAB; ISSN: 0016-5085
PB W. B. Saunders Co.
DT Journal
LA English
RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Dextran Sulfate Inhibits IFN-γ-Induced Jak-Stat Pathway in Human Vascular Endothelial Cells
AB Human vascular endothelial cells can be induced by IFN-γ to express class II MHC proteins. Previously, dextran sulfate was shown to selectively inhibit expression of class II MHC by preventing transcription of the gene encoding CIITA, a transactivator protein required for IFN-γ-inducible expression of class II genes. Here, the authors characterized the effects of dextran sulfate on the intracellular events occurring prior to CIITA activation. Immunopptn. and Western blot analyses indicated that IFN-γ-induced phosphorylation of Stat1 and Jak2 was blocked by dextran sulfate. In addition, electron micrographs showing the large accumulation of dextran sulfate particles in the cytoplasms of endothelial cells demonstrated that Stat and Jak proteins may directly interact with dextran sulfate. Binding of radiolabeled IFN-γ to cells indicated that dextran sulfate may also modulate IFN-γ interactions with the cell surface. Thus, dextran sulfate is capable of interfering with the IFN-γ-induced expression of class II MHC genes at multiple sites. (c) 1999 Academic Press.
AN 1999:191152 HCAPLUS <<LOGINID::20081222>>
DN 131:39387
TI Dextran Sulfate Inhibits IFN-γ-Induced Jak-Stat Pathway in Human Vascular Endothelial Cells
AU Lian, Rebecca H.; Kotwal, Girish J.; Hunt, Lawrence A.; Wilson, Mark A.; Justus, David E.
CS Department of Microbiology and Immunology, University of Louisville School

of Medicine, Louisville, KY, 40292, USA
SO Cellular Immunology (1999), 192(2), 140-148
CODEN: CLIMB8; ISSN: 0008-8749
PB Academic Press
DT Journal
LA English
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI cAMP-mediated phosphorylation of the low-Km cAMP phosphodiesterase markedly stimulates its catalytic activity
AB Treatment of intact human platelets with the adenylate cyclase agonist forskolin (100 μM) resulted in an increase in cAMP phosphodiesterase activity in freeze-thaw lysates. When the low-Km (high affinity), cGMP-inhibited cAMP phosphodiesterase was isolated from such lysates by blue dextran-Sepharose chromatog., the specific activity of the enzyme was increased an average of 11-fold over similarly processed control platelets. The increase in the low-Km, cGMP-inhibited cAMP phosphodiesterase activity was inhibited when platelets were incubated with the protein kinase inhibitor H 8 prior to treatment with forskolin, suggesting that the stimulation of cAMP phosphodiesterase activity involved a cAMP-dependent phosphorylation. When intact platelets that had been prelabeled with inorg. [32P]phosphate were treated with forskolin and the low-Km, cGMP-inhibited phosphodiesterase was isolated by blue dextran-Sepharose chromatog., a protein of 110,000 kDa was phosphorylated. By using a monospecific antiserum to the purified phosphodiesterase, this protein was shown to be the low-Km, cGMP-inhibited cAMP phosphodiesterase by Western blot anal. and by immunopptn. The stable prostacyclin analog iloprost also stimulated the low-Km cAMP phosphodiesterase activity .apprx.2-fold and caused phosphorylation of the enzyme. Apparently, phosphorylation of the low-Km, cGMP-inhibited phosphodiesterase may be an important regulatory mechanism for this enzyme in platelets.
AN 1989:54985 HCAPLUS <<LOGINID::20081222>>
DN 110:54985
OREF 110:9053a,9056a
TI cAMP-mediated phosphorylation of the low-Km cAMP phosphodiesterase markedly stimulates its catalytic activity
AU Grant, Paul G.; Mannarino, Anthony F.; Colman, Robert W.
CS Sch. Med., Temple Univ., Philadelphia, PA, 19140, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1988), 85(23), 9071-5
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English

L12 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors
AB Dextran was modified by palmitoylation and/or phosphorylation to yield 3 derivs.:palmitoyldextran phosphate [63026-23-3] dextran phosphate [9041-77-4], and palmitoyldextran [63026-27-7]. Of these compds., only palmitoyldextran phosphate showed growth-inhibitory activity against Ehrlich solid tumor in mice. In combination therapy with mitomycin C [50-07-7], bleomycin [11056-06-7], cyclophosphamide [50-18-0], and 5-fluorouracil [51-21-8], palmitoyldextran phosphate manifested strong synergistic effects against both Sarcoma 180 ascites and L1210 leukemic tumors. The compound was not directly cytocidal against Sarcoma 180 ascites tumor, but it appeared to act via activation of peritoneal macrophage.

The antitumor activity of palmitoyldextran phosphate apparently is mainly due to immunol. host-mediated mechanisms.

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